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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/075,761 | 02/15/2002 | Hiroshi Tada | Q68574 | 9499 |

7590

07/31/2003

SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

GARRETT, DAWN L

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 07/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/075,761

Applicant(s)

TADA ET AL.

Examiner

Dawn Garrett

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 8-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Restriction

1. Applicant's election without traverse of Group I, claims 1-7, in Paper No. 5 (dated June 6, 2003) is acknowledged. Claims 8-21 are withdrawn as non-elected.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1, upon which claims 2-6 depend, recites "a plurality of striped upper electrodes formed on said organic thin film layer along a second direction different from said first direction". The claim does not previously recite "a first direction", so the claim is unclear with regard to the orientation of the upper electrodes as compared to the other components. For example, it is unclear which component is intended to be positioned in a first direction. Clarification and/or correction are required. For purposes of examination, the examiner interprets the striped upper electrodes' second direction to be in relation to the position of the striped lower electrodes.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyashita et al. (US 2001/0001050 A1). Miyashita et al. disclose an organic electroluminescent element comprising pixel electrodes formed on a substrate (see abstract). The glass substrate (104) reads upon the instant "insulating substrate" (see fig. 1 and par. 157, example 1, and par. 42) per instant claims 1 and 5. The indium tin oxide (ITO) electrodes read upon the instant "lower electrodes" per instant claims 1, 5, and 6 (see fig. 1 and par. 157). The Miyashita et al. banks (105) may be comprised of carbon black (see par. 46) and are formed between the lower electrodes per instant claim 1 (see also fig. 1). The Miyashita et al. luminescent layer (108), which completely covers the banks (105) and the lower electrodes (101), (102), and (103), reads upon the instant "at least one organic thin film layer including an emitting layer formed on said fillers and said lower electrodes" (see fig. 1 and par. 54). The cathode (113) is formed over the luminescent layer (108) (see fig. 1 and par. 60). The cathode is formed in a pattern perpendicular to the lower electrodes per instant claim 7 (see figures and par. 174). In a further embodiment, Miyashita et al. discloses including a hole injecting and transfer layer (208) between the luminescent layer (210) and the electrodes (201), (202), and (203) (see fig. 2 and par. 106) per instant claim 3. Miyashita et al. is deemed to anticipate all components of claims 1-3 and 5-7.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.


8. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furukawa et al. (JP 2000-123978) in view of Endo et al. (US 6,197,704). Furukawa et al. teach organic electroluminescent devices comprising a transparent substrate (1) such as glass, transparent (ITO) anodes (2), insulating film (3) between the anodes, a hole injecting layer (4) over the anodes and insulating film, light emitting layer (5), electron injecting layer (6), and cathodes (or "negative electrodes") (7) (see front page drawing of abstract and par. 5). The cathodes are formed perpendicular to the anodes per instant claim 7 (see drawing on front page of abstract). The Furukawa et al. insulating film (3) reads upon the instant "plurality of fillers"; however, Furukawa et al. fails to teach the insulating film is comprised of amorphous carbon. Furukawa et al. teaches one material appropriate for the insulating film is polyimide (see par. 18). Endo et al. teaches in the analogous art of insulating materials for electronic devices polyimide is an insulating material equivalent to amorphous carbon (see col. 1, lines 49-54). It would have been obvious to one of ordinary skill in the art to substitute amorphous carbon for the polyimide insulating film in the Furukawa et al. device, because Endo et al. teaches polyimide and amorphous carbon are equivalent insulating materials for an electronic device with similar dielectric constants.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (703) 305-0788. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached at (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.


DAWN L. GARRETT
PATENT EXAMINER
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D.G.
July 22, 2003